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Title: Large Eddy Simulations of Turbulence below Antarctic Ice Shelves

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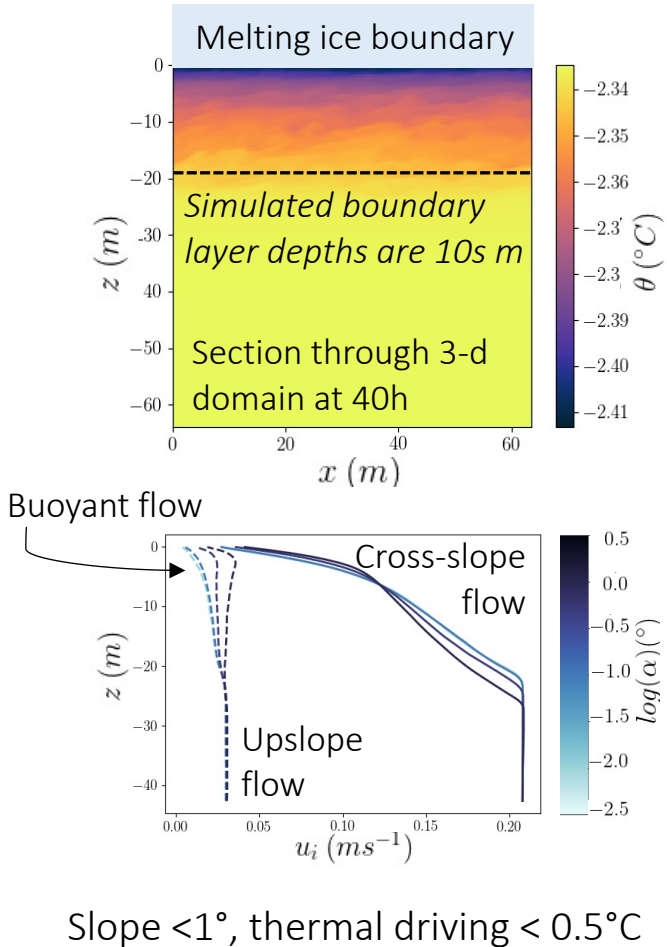
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# Large Eddy Simulations of Turbulence below Antarctic Ice Shelves

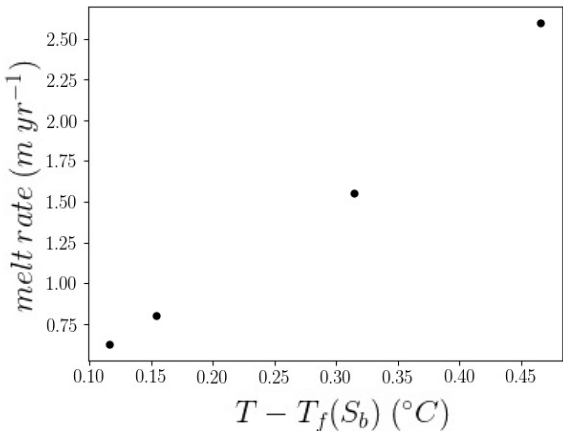
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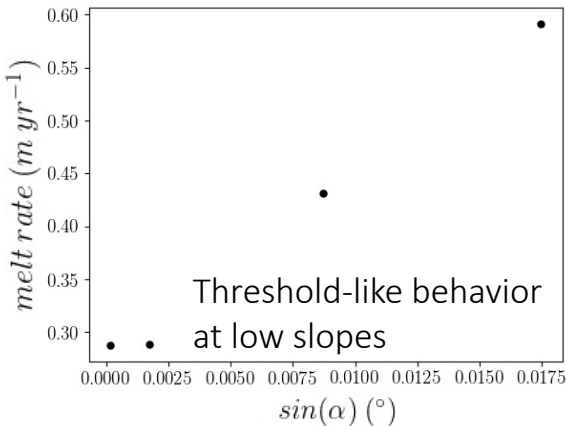
We present large-eddy simulations (PALM) of stratified turbulence below a melting, sloped ice-shelf base



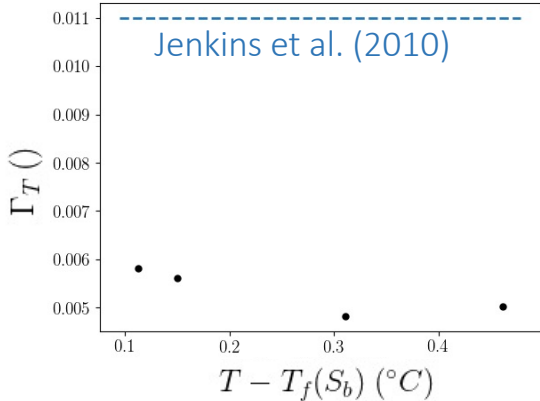
Simulation results support a linear relationship between  
(a) melt rate and thermal driving (1° slope)



(b) melt rate and slope (0.1°C thermal driving)



Low thermal exchange coefficients ( $\Gamma_T$ ) suggest  
(a) revision of parameterization needed  
(b) PALM is too dissipative



Simulated melt rates are sensitive to the flow orientation relative to the slope

